What is claimed is:

1. A light emitting device, comprising:

a light emitting element; and

an adhesion layer to bond the light emitting element to a mounting member;

wherein the adhesion layer is composed of inorganic material particles and a transparent inorganic binding layer to be formed between the neighboring inorganic material particles, and the inorganic material particles are substantially connected with each other in the adhesion layer.

2. The light emitting device according to claim 1, wherein:

the inorganic material particles are of diamond.

3. The light emitting device according to claim 1, wherein:

the inorganic material particles are covered with the transparent inorganic binding layer, and the transparent inorganic binding layer has a thickness of equal to or less than an average diameter of the inorganic material particles.

4. The light emitting device according to claim 1, wherein:

the light emitting element is of flip-chip type, and a space between an electrode face of the light emitting element and th mounting member is filled with the adhesion layer.

5. The light emitting device according to claim 1, wherein:

the transparent inorganic binding layer is formed by heating inorganic-coating forming liquid that includes a mixture of the hydrolysate and the hydrolysis/condensation polymer of an alkoxide compound represented by general formula: $M^{a+}(OR^1)_mR^2_{a-m}$, where M includes any one of Si, Al, Zr and Ti, R^1 is hydrocarbon group with a carbon number of 1 to 5, alokoxyalkyl group or acyl group, R^2 is an organic group including at least one selected from vinyl, amino, imino, epoxy, acryloyloxy, methacryloyloxy, phenyl, mercapto and alkyl groups, a is a valance of M, and a and m are integers.

6. An adhesion layer for bonding a light emitting element to a member, comprising:

diamond particles; and

transparent inorganic binding layer;

wherein the diamond particles are substantially connected each other in the adhesion layer.

7. A method of forming an adhesion layer for bonding a light emitting element to a mounting member, comprising the steps of:

preparing adhesion layer precursor material by mixing inorganic-coating forming liquid and inorganic material particles; and

thermally treating the adhesion layer precursor material while laying the adhesion layer precursor material between the light emitting element and the mounting member.

8. The method according to claim 7, wherein:

the thermally treating step is conducted at a temperature of 500 ℃ or lower.

9. The method according to claim 7, wherein:

the inorganic-coating forming liquid includes a mixture of the hydrolysate and the hydrolysis/condensation polymer of an alkoxide compound represented by general formula: $M^{a-}(OR^1)_mR^2_{a-m}$, where M includes any one of Si, Al, Zr and Ti, R^1 is hydrocarbon group with a carbon number of 1 to 5, alokoxyalkyl group or acyl group, R^2 is an organic group including at least one selected from vinyl, amino, imino, epoxy, acryloyloxy, methacryloyloxy, phenyl, mercapto and alkyl groups, a is a valance of M, and a and m are integers.

10. A light emitting device, comprising:

a light emitting element; and

an adhesion layer to bond the light emitting element to a mounting member;

wherein the adhesion layer is formed by thermally treating adhesion layer precursor material that inorganic-coating forming liquid and diamond particles are mixed.

11. The light emitting device according to claim 1, wherein:

the inorganic material particles are of phosphor.

12. The light emitting device according to claim 11, wherein:

the phosphor particles are covered with the transparent inorganic binding layer, and the transparent inorganic binding layer has a thickness of equal to or less than an average diameter of the phosphor particles.

13. The light emitting device according to claim 11, wherein:

the light emitting element is of flip-chip type, and a space between an electrode face of the light emitting element and the mounting member is filled with the adhesion layer.

14. The light emitting device according to claim 11, wherein:

the transparent inorganic binding layer is formed by heating inorganic-coating forming liquid that includes a mixture of the hydrolysate and the hydrolysis/condensation polymer of an alkoxide compound represented by general formula: $M^{a+}(OR^1)_mR^2_{a-m}$, where M includes any one of Si, Al, Zr and Ti, R^1 is hydrocarbon group with a carbon number of 1 to 5, alokoxyalkyl group or acyl group, R^2 is an organic group including at least one selected from vinyl, amino, imino, epoxy, acryloyloxy, methacryloyloxy, phenyl, mercapto and alkyl groups, a is a valance of M, and a and m are integers.

15. The method according to claim 7, wherein:

the inorganic material particles are of phosphor.

16. A method of making a light emitting device, comprising the steps of:

preparing precursor material by mixing inorganic-coating forming liquid and phosphor particles;

molding a phosphor frame that opens in the optical axis of light emitting element using the precursor material; and

fixing the light emitting element in the phosphor frame.

17. A light emitting device, comprising:

a phosphor frame that opens in the optical axis of light emitting element; and

the light emitting element that is fixed in the phosphor frame;

wherein the phosphor frame is composed of phosphor particles and transparent inorganic binding layer, and the phosphor particles are substantially connected each other in the phosphor frame.

18. A light emitting device, comprising:

a light emitting element; and

a phosphor layer that radiates fluorescent light while being excited by light emitted from the light emitting element;

wherein the phosphor layer is composed of phosphor particles and transparent inorganic binding layer to be formed between the neighboring phosphor particles.

19. The light emitting device according to claim 18, wherein:

the phosphor particles are covered with the transparent

inorganic binding layer, and the transparent inorganic binding layer has a thickness of equal to or less than an average diameter of the phosphor particles.

20. The light emitting device according to claim 18, wherein:

the transparent inorganic binding layer is formed by heating inorganic-coating forming liquid that includes a mixture of the hydrolysate and the hydrolysis/condensation polymer of an alkoxide compound represented by general formula: $M^{a+}(OR^1)_mR^2_{a-m}$, where M includes any one of Si, Al, Zr and Ti, R^1 is hydrocarbon group with a carbon number of 1 to 5, alokoxyalkyl group or acyl group, R^2 is an organic group including at least one selected from vinyl, amino, imino, epoxy, acryloyloxy, methacryloyloxy, phenyl, mercapto and alkyl groups, a is a valance of M, and a and m are integers.

21. A light emitting device, comprising:

a light emitting element; and

a phosphor layer that radiates fluorescent light while being excited by light emitted from the light emitting element;

wherein the phosphor layer is composed of phosphor particles and transparent inorganic binding layer to be formed between the neighboring phosphor particles, and the phosphor particles are filled to be substantially connected with each other in the phosphor layer.

22. A phosphor layer for light emitting element, comprising:

phosphor particles; and

transparent inorganic binding layer to be formed between the neighboring phosphor particles;

wherein the phosphor particles are filled to be substantially connected with each other in the phosphor layer.

23. A phosphor layer for light emitting element, comprising:

phosphor particles; and

transparent inorganic binding layer to be formed between the neighboring phosphor particles;

wherein a space is formed between the phosphor particles.

24. A method of forming a phosphor layer for light emitting device, comprising the steps of:

preparing phosphor layer precursor material by mixing inorganic-coating forming liquid and phosphor particles; and

thermally treating the phosphor layer precursor material.

25. The method according to claim 24, wherein:

the thermally treating step is conducted at a temperature of 500 ℃ or lower.

26. The method according to claim 24, wherein:

the inorganic-coating forming liquid includes a mixture of the hydrolysate and the hydrolysis/condensation polymer of an alkoxide compound represented by general formula: $M^{a-}(OR^1)_mR^2_{a-m}$, where M includes any one of Si, Al, Zr and Ti.

R^1 is hydrocarbon group with a carbon number of 1 to 5, alokoxyalkyl group or acyl group. R^2 is an organic group including at least one selected from vinyl, amino, imino, epoxy, acryloyloxy, methacryloyloxy, phenyl, mercapto and alkyl groups, a is a valance of M, and a and m are integers.

27. The method according to claim 24, wherein:

the phosphor layer precursor material is coated on a light emitting element.

28. The method according to claim 24, wherein:

the phosphor layer is molded using the phosphor layer precursor material.

29. A method of making a light emitting device, comprising the steps defined in the method of forming the phosphor layer according to claim 24.

30. A light emitting device, comprising:

a light emitting element; and

a phosphor layer that radiates fluorescent light while being excited by light emitted from the light emitting element;

wherein the phosphor layer is formed by thermally treating phosphor layer precursor material that inorganic-coating forming liquid and phosphor particles are mixed.

31. A light emitting device, comprising:

a light emitting element; and

a molded phosphor layer that is of inorganic material molded.

32. The light emitting device according to claim 31, wherein:

the phosphor layer is formed around the light emitting element.

33. The light emitting device according to claim 32, wherein:

the phosphor layer has a lower end that is located lower than a light emitting layer of the light emitting element.

34. The light emitting device according to claim 31, further comprising:

transparent inorganic material that is filled between the light emitting element and the phosphor layer.

35. The light emitting device according to claim 34, wherein:

the phosphor layer is molded using phosphor layer precursor material that inorganic-coating forming liquid and phosphor particles are mixed, and the transparent inorganic material is formed by hardening the inorganic-coating forming liquid.

36. The light emitting device according to claim 35, wherein:

th inorganic-coating forming liquid includes a mixture

of the hydrolysate and the hydrolysis/condensation polymer of an alkoxide compound represented by general formula: $M^{a+}(OR^1)_mR^2_{a-m}$, where M includes any one of Si, Al, Zr and Ti, R^1 is hydrocarbon group with a carbon number of 1 to 5, alokoxyalkyl group or acyl group, R^2 is an organic group including at least one selected from vinyl, amino, imino, epoxy, acryloyloxy, methacryloyloxy, phenyl, mercapto and alkyl groups, a is a valance of M, and a and m are integers.